

## CHAPTER

## 2

## Consumer Confidence Report (CCR)

The guiding principle behind consumer confidence reports (CCRs), also known as the Annual Drinking Water Quality Report, is that all people have the right to know what is in their drinking water and where it comes from. The CCRs provide an opportunity for water suppliers to educate consumers about the source and quality of their drinking water, and to involve them in decisions about it. The USEPA has revised its public notification requirements to expedite notification of serious health threats and simplify notification of other violations. Consumers who are familiar with the basic drinking water information in the CCRs will be able to participate more effectively in the notification processes. The information contained in the CCRs will assist consumers in making informed choices concerning their health and the health of their families. The information contained in the CCRs allows consumers to better understand and appreciate the challenges faced by public water suppliers in delivering safe drinking water. Educated consumers are more likely to help public water suppliers protect drinking water sources and realize the need to upgrade the treatment facilities in order to make their drinking water safe.

CCRs are based on one calendar-year of data. If a public water supplier is allowed to monitor for regulated contaminants less often than once a year, the date and results of the most recent testing where detections resulted will be listed. No results older than five (5) years will be included in the CCR.

Public water suppliers must deliver the CCRs for the previous year **by July 1st**. A “new” PWS must deliver its first CCR by July 1st of the year following its first full calendar year in operation and annually thereafter.

This chapter will guide you through the requirements for producing and distributing a satisfactory CCR. Appendices to this chapter will include Illinois EPA reporting forms, required CCR language, templates, and examples. All CCR correspondence and/or questions should be directed to:

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## First Step to Creating a CCR

There are several different assistance tools or options (templates) to choose from when creating a CCR. Below are five different options (you are not limited to these options) to get you started:

1. The Illinois EPA has a customized detected result table and personalized CCR report available on the Internet. “If” you do not need to include any additional information (e.g., violation explanations, parent supplies data table, etc.), then you will be able to photocopy and distribute this report. Your report can be downloaded at the following Internet web address:

<http://www.epa.illinois.gov/topics/drinking-water/index>

*Click the blue web link entitled Drink Water Watch. Next, click the Review Consumer Confidence Data tab at the bottom left.*

If you choose to use the report we provide, a careful review of the data must be performed. If any errors or discrepancies are found, all applicable edits/additions/corrections must be made to the report prior to distribution. You do NOT have to get your edits/additions/corrections approved by the Illinois EPA prior to issuing your CCR.

2. The Illinois EPA customized CCR can be difficult to edit/add/change information because of the limited “output” options. If you are familiar with Rich Text Format (rtf), a “fill in the blank” template can be downloaded at: <http://www.epa.illinois.gov/topics/compliance-enforcement/drinking-water/sample-collectors-handbook/index>

To complete the rtf template, you will need to first print the Illinois EPA customized CCR as described in option 1. The next step is to simply transpose (re-type) the information from the Illinois EPA customized CCR to your personal CCR version. This should allow you the greatest flexibility to edit/add/change information as needed.

3. USEPA has developed software that allows a user to generate a CCR. This software is called CCRiWriter. The CCRiWriter Web site is:

[https://ofmpub.epa.gov/apex/safewater/f?p=140:LOGIN\\_DESKTOP:.....](https://ofmpub.epa.gov/apex/safewater/f?p=140:LOGIN_DESKTOP:.....)

To use this software, you will need to have your sample data and violation information ready. This software does not automatically populate your contaminant detection and violation tables. You will need to supply this information as you “build” your CCR report. More information can be found at the web site.

4. Use this Handbook chapter and start from scratch. All CCR requirements are listed following this page.
5. Hire an outside firm to complete the CCR for you.

Regardless of which option is chosen, a fair amount of work will be needed to produce a satisfactory report that your customers can understand. It is strongly recommended that after you produce a draft CCR, you have several persons proof read it for clarity before distribution. This simple task may help save many telephone calls from confused customers.

## **CCR Requirements**

The CCRs are based on calendar-year data. The CCR will include sample data collected from the previous calendar year or when a public water supplier is allowed to monitor for regulated contaminants less often than once a year, the date and results of the most recent testing where detections resulted. No results older than five (5) years need to be included in the CCR.

Public water suppliers must deliver the CCRs for the previous year **by July 1<sup>st</sup>** of the current year. Parent/Source public water suppliers must deliver information to their satellites **by April 1<sup>st</sup>**. **The two systems may enter into a contractual agreement that could result in an alternate delivery date of sample data to the satellite.** A new public water supply must deliver its first CCR by July 1<sup>st</sup> of the year following its first full calendar year in operation and annually thereafter.

If your supply sells or purchases water from another supply you will need to carefully review **Appendix A** to know your rights and responsibilities.

You must also complete and submit a certification form each year. The self-assessment check list should be completed **prior** to CCR distribution to consumers. The self-assessment is a check-list of CCR requirements so that you can be confident no requirements are missed. These requirements are explained on page 16 and in **Appendix C**

## **CCR Content**

Your CCR is required to contain the following items.

<b>Water System Information</b>	<ul style="list-style-type: none"> <li>-Name/phone number of contact person</li> <li>-Information on public participation</li> <li>-Information for non-English speaking population, if applicable</li> </ul>
<b>Sources of Water</b>	<ul style="list-style-type: none"> <li>-Type and location of water sources</li> <li>-Availability of source water assessment</li> <li>-Source water susceptibility information</li> </ul>
<b>Required Educational Information</b>	<ul style="list-style-type: none"> <li>- MANDATORY educational statements regarding drinking water contamination</li> <li>-Explanation of contaminants and their presence in drinking water</li> <li>-Information to customers that some people may be more vulnerable to contaminants in drinking water</li> </ul>
<b>Information on Compliance With Monitoring, Reporting, and Treatment</b>	<ul style="list-style-type: none"> <li>-Explanation of violations including potential health effects and corrective actions taken</li> <li>-Explanation of variance/exemption, if applicable</li> <li>-Warning for vulnerable populations about <i>Cryptosporidium</i> and <i>Radon</i>, if applicable</li> </ul>
<b>Table of Detected Contaminants</b>	<ul style="list-style-type: none"> <li>-Definitions: Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), others as needed</li> <li>-Likely source of each contaminant</li> <li>-For MCL violations: health effects language, explanation of violation, and steps the water system took to correct the violations</li> <li>-Informational statements on nitrate, arsenic and turbidity, if necessary, and lead, always required</li> </ul>

## **Preparing Your CCR**

There are **9 steps** or informational categories to consider when creating a satisfactory CCR.

### **STEP 1: CCR Title**

The CCR Rule does not require the use of a report title; however, it is recommended. The report title, if used, should catch the customer's attention; for example, "Consumer Confidence Report," "Annual Drinking Water Quality Report" could be used. Customers are most interested in a clear statement of whether or not their drinking water meets all the relevant USEPA and Illinois EPA standards. Although not mandated by the CCR Rule, it is effective to begin the CCR by explaining the steps taken to protect their drinking water and whether the water meets all drinking water standards.

**EXAMPLE:** *This year, as in years past, your tap water met all USEPA and state drinking water health standards. Our system vigilantly safeguards its groundwater supply, and we are able to report that the department had no violation of a contaminant level or of any other water quality standard in the previous year. This report summarizes the quality of water that we provided last year, including details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with this information because informed customers are our best allies.*

### **STEP 2: Contact Information and Opportunities for Public Participation**

You must include a name and telephone number of a person at the public water supply who can provide additional information and answer questions about the CCR.

List any opportunities for public participation in the decision-making processes that affect drinking water quality, for instance, the time and place of regularly scheduled board meetings. If the public water supply does not host regularly scheduled meetings, customers should be told how they could get information when meetings are announced. See the example below.

**EXAMPLE:** *If you have any questions about this report or concerning your water system, please contact (give the name and phone number of a person able to address the customer's questions). We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings (provide the date, time and location of meeting).*

### **STEP 3: Language**

For public water supplies with large portions of non-English speaking customers, the public water supply information must include, in the **appropriate language(s)**, the importance of the CCR and/or where to obtain additional information. The determination to add a multi-lingual paragraph **must** be made by the public water supply. (See example on next page)

The regulation specifies that public water supply must make a “good faith” effort for all consumers to receive and understand the CCR.

**EXAMPLE:** *Spanish--Este informe contiene información muy importante. Tradúscalo ó hable con alguien que lo entienda bien. (“This report contains very important information. Translate it, or speak with someone who understands it.”)*

## STEP 4: Source Water Type

If a public water supply sells or purchases water from another public water supply, review **Appendix A** for more information on rights and responsibilities of parent/source and satellite public water supplies.

The CCR must include the type of water (groundwater, surface water, or a blend), including any commonly used name(s) (i.e. Lake Michigan or Illinois Prairie Aquifer).

Explaining the various interconnections and back-up sources may be difficult, but it is important that consumers understand that the source of their water may vary during the year; deciding whether to explain a well that is only used a few days a year is a judgment call.

**EXAMPLE:** *Our town uses groundwater provided by two wells drilled into the Illinois Prairie aquifer. An aquifer is a geological formation that contains water. Both of the wells are located within the city limits. Water is pumped from both wells, blended together, and then treated. Your home normally receives a mixture of water from both wells #1 and #2.*

## STEP 5: Source Water Assessment

Your Illinois EPA “Source Water Assessment Summary” is available online at:

<http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>

This summary will include the information that is required to be included in the CCR. All CCRs must include the following source water assessment information:

- Notification to consumers of the availability of the assessment;
- A brief summary of the source water’s susceptibility to contamination (based on the findings of the source water assessment).

**EXAMPLE:** *The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at 555-555-1515. Information provided by this assessment indicates our water supply is vulnerable to contamination from synthetic organic chemicals used by agricultural companies in the area. Vulnerability also exists due to ethylbenzene and xylene discharged from area petroleum refineries.*

## STEP 6: Mandatory Information / Statements

Your CCR must include several mandatory statements. The items in this section are educational statements regarding commonly found drinking water contaminants. The language used in the first two items is **MANDATORY** and every CCR must contain these statements **WORD FOR WORD**.

### **Mandatory Statement #1**

*Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).*

### **Mandatory Statement #2**

*Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).*

The next three statements contain **required information** on the different types of contaminants that may be present in drinking water. Public water suppliers may use comparable language for this section. This means that the information may be reworded and/or tailored to the public water supply; it does not mean that the inclusion of this information is optional. Even if reworded and/or tailored, the information in this section must be substantially included:

### **Required Information Statement #1**

*The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and radioactive materials, and pick up substances resulting from the presence of animals or human activity. Possible contaminants consist of:*

- *Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;*
- *Inorganic contaminants, such as salts and metals, which may be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;*
- *Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses;*
- *Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems; and*
- *Radioactive contaminants, which may be naturally occurring or be the result of oil and gas production and mining activities.*

### **Required Information Statement #2**

*In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.*

**Required Information Statement #3**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [NAME OF UTILITY] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

**IF** a public water supply has operated under a **variance or exemption** at any time during the report year, the CCR must include an explanation of the variance or exemption. Include the following: definition of variance or exemption, date that it was issued, why it was granted, when it is up for renewal, and a status report on what the a public water supply is doing to remedy the problem. If the public may participate in the review of the variance or exemption, include a notice about how to participate.

**Suggested Language for Variance/Exemption (if applicable)**

*A variance or exemption is state or USEPA permission not to meet an MCL or a treatment technique under certain conditions. On January 4, 1995, our system was granted a variance from restricted status. A system under restricted status will not be granted construction permits to extend their water mains. We were put on restricted status due to a history of chemical detection in our wells. We were granted the variance from restricted status since we have drilled new wells that will be fully operational in the next six months.*

**IF** a public water supply has been issued a **vulnerability waiver** for the monitoring of SOC's and/or VOC's, the CCR must include an explanation of the waiver.

**Suggested Language for Vulnerability Waiver (if applicable)**

*Due to favorable monitoring history, aquifer characteristics, and inventory of potential sources of contamination, our water supply was issued a vulnerability waiver renewal. No monitoring for VOC's and SOC's is required between January 1, 2011 and December 31, 2013.*

**IF** the public water supply performed monitoring that indicates the presence of **cryptosporidium**, either in source (raw) water or finished water, the CCR must include a summary of the monitoring results and an explanation of the significance of the results.

**Suggested Language for Detection of cryptosporidium (if applicable)**

*Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring of source water and/or finished water indicate the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. Immuno-compromised individuals are encouraged to consult their doctors regarding appropriate precautions to avoid infection. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.*



**If** the public water supply monitored for **radon** and it was detected, the CCR must include a summary of the monitoring results and an explanation of the significance of the results.

**Suggested Language for Detection of Radon (if applicable)**

*Radon is a radioactive gas that occurs naturally in some ground water. It may pose a health risk when the gas is released from water into air, as occurs during showering, bathing, or washing dishes and clothes. Radon gas released from drinking water is a relatively small part of the total radon in air. Major sources of radon gas are soil and cigarettes. Inhalation of radon gas has been linked to lung cancer; however it is not clear how radon in your drinking water contributes to this health effect. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on how to have your home tested, contact [insert name of health department or other source of local test kits], or call 1-800-SOS RADON.*

**If** the community public water supply receives notice of an ***E. coli* indicator-positive ground water source sample** they must provide special notice in the CCR addressing that year, informing the public served by the water system of the *E. coli* indicator-positive source sample. The system must continue to inform the public annually (as special notice in the CCR) until the Illinois EPA determines that the fecal contamination in the ground water source has been corrected. In order to address this special notice requirement, the following elements must be included in the CCR:

- The nature of the source of the fecal contamination (if the source is known) and the dates of the fecal indicator positive ground water source sample(s).
- If the fecal contamination in the ground water source has been addressed.
- For fecal contamination in the ground water source that has not been addressed, the state-approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed.
- The potential health effects using the health effects language.

In addition to the special notice requirements, a CWS must also include the *E. coli* indicator-positive result in the Regulated Contaminant table in the CCR addressing that year.

**Example**

Contaminant	TT	MCLG	Value	Date	Violation	Source
E. coli	TT	N/A	Positive	April 5, 2010	No	Human and animal fecal waste

*\*System A detected E. coli in their source water sample; the sample was collected in response to a total coliform-positive routine sample collected on April 2, 2010. More information about this situation is provided in the Situation section.*

On April 4, 2010 we were informed that one of our routine total coliform samples collected on April 2 was total coliform-positive. As required by the Ground Water Rule, we collected samples from both of our sources, Wells 1 and 2, and had them analyzed for fecal contamination. The sample for Well 1 was positive for fecal contamination (*E. coli*).

Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches. Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

In response, we sent notices to all of our customers within 24 hours of learning of this positive sample. We carefully considered our options and developed a plan with the State Department of Public Health to extend the well's casing higher above the ground, replace the well cap, and install treatment (chlorination). As we stated in the most recent update on this issue, treatment was installed on June 1, 2010.

**If** the community public water supply receives notice from the Illinois EPA of a **GWR significant deficiency**, then the PWS must inform its customers of the significant deficiency that is uncorrected in their CCR.

#### **EXAMPLE**

On September 14, 2013, we were informed by the Illinois EPA that a significant deficiency—two leaking septic tanks near our source water supply—had been identified during a September 1, 2013 sanitary survey. As required, we contacted the Illinois EPA and were directed to make arrangements with the owner of the property on which the septic tanks are located to have the tanks replaced. We did not do so within the established deadline. Since being informed of the deficiency, we have been conducting regular testing of our source water and we are implementing the corrective action plan established by the Illinois EPA. Under this plan, the leaking tanks will be replaced by October 20, 2014.

### **STEP 7: Violation Reporting**

**If** your water supply had a violation(s) during the reporting year, a brief summary must be included describing what happened. At a minimum, the summary must include:

- A clear and readily understandable explanation of the violation(s);
- Potential adverse health effects (if any); and
- The steps the system has taken to correct the violation(s).

Below is some example language for the different type of violations

#### **Treatment Technique Violations**

Filtration and disinfection (Surface Water Treatment Rule requirements) — If the violation was a failure to install adequate filtration or disinfection equipment or processes, or there was a failure of that equipment or process, include the following language:

**EXAMPLE:** *Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.*

Lead and copper control requirements — If the violation was a failure to meet corrosion control treatment, source water treatment, or lead service line requirements; you will need to include the relevant health effects language for lead or copper:

**EXAMPLE:** *The (supply name) failed to submit the required source water and optimal corrosion control treatment recommendations by the required date (insert date). The recommendation is an explanation to the state of what the water supply plans to initiate in order to reduce the amount of lead and copper exposure to its consumers. Failure to submit the recommendations in a timely manner has resulted in a treatment technique violation for which we submitted public notification.*

## **Monitoring Violations**

If a public water supply failed to monitor during the scheduled sampling period and incurred a public notice requirement, you must describe what happened. Several examples below:

**EXAMPLE 1:** *The village water supply failed to collect **volatile organic chemical (VOC)** samples during the June monitoring period. The VOCs include chemicals such as total xylenes, vinyl chloride, and benzene. Failure to monitor could allow trace quantities of these chemicals to go undetected for extended periods of time. These chemicals have been associated with health related problems if the water is consumed for extended periods of time. We collected the samples in October and no VOCs were detected.*

**EXAMPLE 2:** *The village water supply failed to submit the required number of coliform samples during the September monitoring period. Failure to monitor the bacteriological quality of the water could allow contamination in the water system to go undetected. Bacterial contamination may indicate the presence of disease producing organisms that can cause an outbreak of waterborne disease. We are now monitoring as scheduled and no samples have been positive.*

NOTE: This explanation does **NOT** fulfill the public notification requirements; see page 18 or Chapter 1 of the Sample Collector's Handbook.

If a public water supply failed to comply with the terms/conditions of any variance or exemption issued by the Illinois EPA or the Illinois Pollution Control Board, consumers must be told. The following is an example:

**EXAMPLE:** *As a condition of the variance issued to our water supply on March 3, 1987, we must inform customers quarterly of the current radium levels found at our wells. We failed to do so during the first and second quarters of this year. Our new water operator has since issued the public notice as required and will continue doing so each quarter.*

## **STEP 8: Table of Detected Regulated Contaminants**

The CCR must include a table of detected regulated contaminants. This is a mandatory table. The purpose of this table is to identify the highest level of each **detected** contaminant and the range of levels detected for that contaminant found during the CCR reporting year. For each detected contaminant, the table lists the Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and the known or likely source of the contaminant in drinking water. The known or likely source of the contaminant in drinking water can be found in **Appendix D**.

If there are no analytical results for the report year, the table must show the most recent detect, if any, from the last five years. The table must show the date of monitoring and include a brief statement explaining that the data is from the most recent monitoring period. If a public water supply monitors less than once per year (triennial frequency), the table must include results of samples collected during the most recent monitoring period.

This table **MUST** contain the following information and the next several pages will explain each of these requirements as defined in the CCR rule.

#### **Mandatory Table Structure**

- Definitions
- Abbreviations
- List of detected contaminants
- MCLG column
- MCL column
- Level Found column
- Range of Detection column
- Violation column
- Date of Sample column
- Typical Source of Contamination column
- Footnotes included underneath the contaminant explaining the data in the table

#### **Definitions**

It is **mandatory** to include the following definitions. These definitions should be defined at the top of the contaminant detection table. Those indicated with an asterisk (\*) should only be included **if** your table contains information on a contaminant that is regulated by a treatment technique or action level (i.e. turbidity, lead or copper).

<b>Maximum Contaminant Level Goal (MCLG)</b>	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
<b>Maximum Contaminant Level (MCL)</b>	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
<b>Treatment Technique (TT)*</b>	A required process intended to reduce the level of a contaminant in drinking water.
<b>Action Level (AL)*</b>	The concentration of a contaminant that triggers treatment or other required actions by the water supply.
<b>Maximum Residual Disinfectant Level Goal (MRDLG)</b>	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
<b>Maximum Residual Disinfectant Level (MRDL)</b>	The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

### Abbreviations

It is **mandatory** to define the following abbreviations **if** they appear in the table. These abbreviations are defined at the bottom of the “Regulated Contaminants Detected” table.

<b>ND</b>	Not detectable at testing limits
<b>N/A</b>	Not Applicable
<b>AL</b>	Action Level
<b>MFL</b>	Million fibers per liter
<b>TT</b>	Treatment Technique
<b>NTU</b>	Nephelometric Turbidity Units
<b>mrem/year</b>	millirems per year (a measure of radiation absorbed by the body)
<b>pCi/L</b>	picocuries per liter (a measure of radioactivity)
<b>ppm</b>	parts per million, or milligrams per liter (mg/l)
<b>ppb</b>	parts per billion, or micrograms per liter (ug/l)
<b>ppt</b>	parts per trillion, or nanograms per liter
<b>ppq</b>	parts per quadrillion, or picograms per liter

### List of Detected Contaminants (units)

The table must only contain data about regulated contaminants (contaminants subject to an MCL, TT, or AL) and unregulated contaminants that require monitoring under the Illinois EPA 611 regulations. A detected contaminant is any regulated contaminant detected at or above its minimum detection limit. This table must not include contaminants that were not detected.

### MCLG Column

The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. The MCLG must be listed for any detected contaminants and must be expressed in the same units as the MCL.

### MCL Column

The MCL is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. The MCL must be listed for any detected contaminant and it must be expressed as a number greater than 1.0.

### Highest Level Detected Column

In most cases, the “Highest Level Detected” is the annual average of all samples collected during the CCR calendar year. The calculation process is described in detail in **Appendix B** (Interpreting Monitoring Data). If a public water supply has several entry points, information included in the contaminant detection table represents the data from the entry point that had the highest values or it can be the single sample result if only 1 sample was collected during the CCR calendar year.

In other cases, the “Highest Level Detected” is determined by the following:

- Total trihalomethanes and five haloacetic acids: highest locational running annual average (LRAAs). If more than one location exceeds the TTHM or HAA5 maximum contaminant level (MCL), the system must include the LRAA for all locations that exceed the MCL.
- Lead and Copper: include both the lead and copper 90<sup>th</sup> percentile value from the most recent monitoring period.
- Total coliform:
  - Public water supplies that collect **fewer than 40 samples per month**: use the highest number of positive samples collected in any one month.
  - Public water supplies that collect **40 or more samples per month**: use the highest percentage of positive samples collected in any one month.
- Fecal coliform/E. coli: use the highest number of positive fecal/E. coli samples collected in any one month.
- Turbidity: (if applicable, surface supply) include the highest single measurement and the lowest monthly percentage of samples meeting the turbidity limits for the filtration technology being used.

#### Range of Levels Detected Column

For any detected contaminant, list the range from lowest to highest of all samples collected during that CCR reporting year. Two exceptions exist:

- Lead and copper (if applicable): Include the total number of sites that exceeded the action level during the most recent round of monitoring.
- This column does not apply to total coliform, fecal coliform, and *E. coli*. This column should be left blank for these contaminants.

#### Violation Column

Mark this column with a “YES” if a violation of an MCL, TT, or an action level exceedance was recorded for your water supply during the CCR calendar year.

#### Collection Date Column

Some of the data in the table represents samples collected within the last five years due to triennial monitoring or vulnerability waivers. If the table contains detection data that is not from the calendar year of the report, the table must show the date of monitoring and include an explanation.

**EXAMPLE:** *Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.*

### Likely Source of Contaminant Column

For all detected contaminants include the most likely source of contamination. USEPA's intent is for this information to be as specific as possible. The CCR should identify a specific point source, such as "Jay's Hog Farm" or the "Super Shiny Paper Mill". If you are not sure of the contaminant source, include one or more of the typical sources listed in **Appendix D** applicable to your situation.

### STEP 9: Contaminant Detect Table Footnotes

It is very important to provide accurate, easily understandable footnotes that explain the data in the contaminant detected table. Some of the footnotes discussed below are mandatory under certain situations.

#### State-Only Regulated Contaminant Footnote

If a public water supply has a detection of a state-only regulated contaminant (no federal standard), the footnote should contain an explanation that the detection (or MCL) is a state-regulated contaminant and no federal standard exists.

**EXAMPLE:** *This contaminant is not currently regulated by the USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1,000 or more.*

#### Triennial or Less Frequent Monitoring Footnote

If a public water supply monitors less frequent than annually, an explanation must be given.

**EXAMPLE:** *The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.*

#### MCL or Treatment Technique Violation Footnote

If a public water supply had an action level exceedance, MCL or treatment technique violation during the CCR reporting year, you must include the following information in a footnote:

- Length of the violation/exceedance.
- Mandatory health effects language (**Appendix D**).
- Corrective action being taken by the water supply.

### **Special Footnotes for Nitrate, Arsenic, Turbidity and Unregulated Contaminants**

Several informational statements **MUST** be included in the footnote page **IF** the following conditions exist and no violations or exceedances were recorded.

**If the NITRATE level is above 5 mg/l (50 percent of the MCL), but below the MCL.**

*Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.*

**If ARSENIC is detected above 5 ug/l and up to and including 10 ug/l.**

*While your drinking water meets USEPA's standard for arsenic, it does contain low levels of arsenic. USEPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. USEPA continues to research the health effects of low levels of arsenic, which is a naturally-occurring mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.*

**If you measure for TURBIDITY, you must explain why.**

*Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.*

**Unregulated Contaminants - If your supply has a detection of a contaminant that is unregulated, but is required to be monitored, add the following footnote:**

*A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language been set. The purpose of unregulated contaminant monitoring is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.*

### **CCR Certification and Self Assessment Check List**

For the Illinois EPA to verify that CCR requirements have been satisfied, a copy of the CCR along with a Certification form must be submitted at the same time it is sent to your customers, or by July 10th of each year (see Appendix C).

THE SELF-ASSESSMENT CHECK LIST SHOULD BE COMPLETED **PRIOR** TO CCR DISTRIBUTION TO CONSUMERS. The self-assessment is a check-list of CCR elements so that you can be confident no requirements are missed.



## **CCR Method of Delivery**

A public water supplier must deliver a copy of its consumer confidence report to each customer **by July 1<sup>st</sup>** of each year. For this purpose, “customer” is defined as a billing unit or service connection to which water is delivered by a community water system. One of these options must be used:

- Direct mail the report to all customers.
- Electronically direct deliver the report through URL or Email.
- Include the report in a monthly newsletter that is sent to each customer.
- Insert the report in a free local publication that is delivered to each postal patron.
- Hand deliver the report to each customer.
- Include the report with the water bill.

In addition to sending the report to each billing unit or service connection customer, a “good faith” effort must be made to ensure all non-bill-paying consumers (apartment dwellers, etc.) receive the information. A “good faith” effort means selecting the most appropriate method(s) to reach non-bill-paying consumers. Those methods include, but are not limited to:

- posting the report on a publicly accessible Internet site;
- mailing the report to all postal patrons;
- advertising the availability of the report in newspapers, TV and radio;
- publishing the report in a local newspaper;
- posting the report in public places such as cafeterias or lunch rooms of public buildings, libraries, churches, and schools;
- delivering multiple reports for distribution by single-billed customers; such as apartment buildings or large private employers; and
- delivering the report to community organizations.

Systems that serve **100,000 or more** people must also post their reports on a publicly accessible Internet site.

All systems must keep a copy of each CCR on file for a minimum of three years. Copies of the reports must also be available to the public upon request.

### **DON'T FORGET!**

Send a copy of your CCR to the Illinois EPA when you mail it to the customers, include the CCR Certification form along with the report. Your supply is required to have the CCR and Certification Form to the Illinois EPA **by July 10<sup>th</sup>** of each year. The required Certification form is located in **Appendix C**.

## **CCR Method of Delivery “Waivers”**

Method of delivery (MOD) waivers are available for public water suppliers that serve fewer than 10,000 persons and have had no water quality and/or monitoring violations during CCR calendar year. The CCR method of delivery (MOD) waiver is intended to allow financially limited public water supplies to forego the cost of printing and direct mail delivery. **The MOD waiver does not relieve a public water supply from preparing a CCR or notifying consumers of its availability by July 1st of each year.** The MOD waiver has no effect on the required content of the report. The waiver status for each public water supply will be reassessed annually. The use of the MOD is optional and you can always follow the delivery requirements specified on page 16.

### **501-10,000 populations**

Public water suppliers that serve fewer than 10,000 persons but more than 500 and have no water quality or monitoring violations during the CCR calendar year may be issued a MOD waiver. Although direct mail delivery of the CCR to each customer is not required, **you are still required to:**

1. Prepare the CCR;
2. Publish the entire CCR in one or more local newspapers (CCR must be printed in a conspicuous location and in print size which is easily read);
3. Inform the customers (by newspaper) that the reports will not be mailed;
4. Make the reports available upon request;
5. Mail a copy to the Illinois EPA along with the CCR certification form by July 1 of each year.

For the Illinois EPA to verify that you satisfied the CCR requirement, a copy of the CCR and the newspaper article must be submitted to the Illinois EPA, Drinking Water Compliance Unit along with the CCR certification form by July 10th of each year. This required certification form is located in **Appendix C**.

### **25-500 populations**

Public water suppliers that serve fewer than 501 persons and have no water quality or monitoring violations during the CCR calendar year may be issued a MOD waiver. Although direct mail delivery of the CCR to each customer is not required, **the following is required:**

1. Prepare the CCR;
2. Provide notification to customers that a CCR was prepared and is available upon request; this notice of CCR availability must be posted in a conspicuous location, provided directly to each customer, or published in a local newspaper.
3. Make the reports available upon request;
4. Mail a copy to the Illinois EPA along with the CCR certification form by July 1 of each year.

<b>Recommended Language for Notification of CCR Availability:</b>
<i>The (insert name of public water supply) has available upon request this year's Consumer Confidence Report (CCR). The CCR includes basic information on the source(s) of your drinking water, the levels of any contaminants that were detected in the water during 2015, and compliance with other drinking water rules, as well as some educational materials. To obtain a free copy of the report, please call (insert name of contact person) at (insert telephone number of contact person) or you may pick one up at (insert locations).</i>

## **CCR Electronic Direct Delivery**

The IEPA will accept the **electronic direct delivery** of the CCR to your customers to satisfy the CCR customer delivery requirements. This decision is based upon the U. S. Environmental Protection Agency's Consumer Confidence Report Retrospective Review Analysis, which was finalized in a Memorandum on January 3, 2013. This method of direct delivery does not affect your ability to use the Optional Method of Delivery Waivers for systems serving less than 10,000 customers.

*Additional information regarding US EPA's CCR electronic delivery options, including examples can be found in US EPA's Memorandum available at:*

<http://www.epa.gov/sites/production/files/2015-12/documents/ccrdeliveryoptionsmemo.pdf>

It is important to note, Public Water Systems must ensure delivery of the CCR to each of their bill paying customers, which means more than one method of delivery may be necessary, such as a combination of email communications, paper copy delivery, etc. Public Water Systems can distribute the CCR electronically to their customers using the following approved methods:

### **1. Requirements for Email Delivery to the Customer**

- a) The subject line of the email must contain "2014 CCR", the Public Water System Identification Number (PWSID Number) and the Public Water System's Name.
- b) The CCR must either be embedded in its entirety in the email message, have the CCR as a file attachment in PDF format, or contain the direct URL<sup>1</sup> to the CCR.
- c) The URL must take the customer directly to the entire CCR so that the customer does not have to retrieve the CCR by navigating through another website. The email must also contain a description explaining the purpose and content of the URL in the email.
- d) The email must also contain information on how the customer may obtain a paper copy of the CCR (i.e. by calling a phone number)
- e) If the PWS receives a message that the email was undeliverable, the PWS must utilize another method to ensure the customer receives the CCR (i.e. mail a paper copy)

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<sup>1</sup> In computing, a uniform resource locator (URL) is a specific character string that constitutes a reference to an Internet resource.

### **2. Requirements for Mailing the Direct CCR URL to the Customer**

- a) The direct URL to the CCR must be printed directly on a water bill, a bill insert, newsletter, or separate mailing. It must be a direct URL; you can't send the customer to a website where they must then click or download the report.
- b) It must be clear and in a font that is at least as large as the largest font used.
- c) **\*\*A short description explaining the information available must accompany the URL.**
- d) Provide information on how the customer may obtain a paper copy of the document if they choose not to access the CCR by using the URL (i.e. by calling a phone number)

**\*\* (example language)** Please go to [www.anytownwater.org/2013waterreport.pdf](http://www.anytownwater.org/2013waterreport.pdf) to view your 2016 Annual Water Quality Report. This report contains important information about the source and quality of your drinking water during 2015. To obtain a paper copy of the report, please call (555) 555-5555.

The use of social media such as Twitter, Facebook, and automated telephone notification systems **do not** meet the "directly deliver" requirement of the CCR Rule and therefore, cannot be used. They can be used as an additional "good faith" effort to reach all consumers.

## **Using the CCR to comply with the Public Notification Rule**

Monitoring (and reporting) violations require that an annual public notice be distributed to all customers. To help save on cost, the public water supply is allowed to issue this annual public notice along with the CCR.

If you use the CCR to issue your annual Tier 3 public notice, it can be a separate notice OR it may be added to the end of the CCR report. This is in addition to Step 7 – Violation Report (Page 9) as described in this Chapter. In other words, you will need to do the requirements listed in Step 7 concerning violation reporting for the CCR and do a “separate notice” at the end of the CCR to receive credit for issuing public notice. Be sure the “separate notice” includes all Public Notice elements.

When you submit a copy of your CCR and the certification/self-assessment form to the Illinois EPA, also include the Public Notice certification/self-assessment form that was sent to you when you were notified of the violation. If you use the electronic CCR delivery option, you are required to submit a copy of the URL notification in addition to the documents listed above.

For additional information on the Public Notification Requirements, see Chapter 1 of the Sample Collector’s Handbook. This is available at the following internet location:

<http://www.epa.illinois.gov/topics/compliance-enforcement/drinking-water/sample-collectors-handbook/index>